

# Summary of the Lower Limb

## Joints of the Lower Limb

### *Joints and Ligaments of the Pelvis*

Joint or Ligament	Description	Significance
pubic symphysis	symphysis	midline joint uniting the bodies of the pubic bones
sacroiliac joint	synovial, plane	connects ala of sacrum to auricular surface of ilium; fibrous capsule reinforced by dorsal & ventral sacroiliac ligaments
sacrospinous ligament	syndesmosis	connects ischial spine to lateral surface of sacrum & coccyx; together with sacrotuberous ligament, converts greater & lesser ischiadic (sciatic) notches into greater & lesser ischiadic (sciatic) foramina
sacrotuberous ligament	syndesmosis	connects ischial tuberosity to lateral surface of sacrum & coccyx; together with sacrospinous ligament, converts greater & lesser ischiadic (sciatic) notches into greater & lesser ischiadic (sciatic) foramina
iliolumbar ligament	syndesmosis	connects transverse process of L5 to iliac crest

### *Joints and Ligaments of the Lower Limb*

Joint or Ligament	Description	Significance
acetabular labrum	fibrocartilage	fibrocartilage forming rim of acetabulum; deepens the acetabulum
transverse acetabular ligament		bridges the acetabular notch; forms a bridge over the artery in the ligament of the femoral head (ligamentum capitis femoris)
ligament of the		intracapsular ligament connecting transverse

femoral head		acetabular ligament with fovea capitis femoris; also known as: ligamentum capitis femoris
ligamentum capitis femoris		intracapsular ligament connecting transverse acetabular ligament with fovea capitis femoris; also known as: ligament of the femoral head
pubofemoral ligament		capsular ligament of hip joint connecting superior pubic ramus to medial surface of femoral neck
iliofemoral ligament		capsular ligament of the hip joint connecting anterior inferior iliac spine to intertrochanteric line
ischiofemoral ligament		capsular ligament of the hip joint connecting body of ischium to posterior femoral neck
zona orbicularis		fibers of hip joint capsule encircling femoral neck
hip joint	synovial	acetabulum of os coxae articulates with femoral head; reinforced by capsular ligaments (iliofemoral, pubofemoral, ischiofemoral, zona orbicularis) and containing acetabular labrum & ligamentum capitis femoris
knee joint	synovial	femoral condyles articulate with tibial condyles; reinforced by intracapsular ligaments (anterior cruciate & posterior cruciate), a capsular ligament (tibial collateral ligament), and an extracapsular ligament (fibular collateral ligament); contains medial & lateral menisci
patellar ligament	tendon	connects quadriceps femoris muscle group to the tibial tuberosity; patella is a sesamoid bone within the quadriceps tendon
tibial collateral ligament		capsular ligament of the knee joint connecting medial epicondyle of femur with medial surface of medial tibial condyle; its attachment to the medial meniscus is clinically relevant
fibular collateral ligament		extracapsular ligament, not part of the fibrous capsule of the knee; connects lateral epicondyle of femur with fibular head
anterior cruciate ligament		intracapsular ligament connecting anterior aspect of intercondylar eminence of tibia with medial surface of lateral femoral condyle
posterior cruciate		intracapsular ligament connecting posterior

ligament		aspect of intercondylar eminence of tibia with lateral surface of medial femoral condyle
medial meniscus	fibrocartilage	intra-articular disc within knee joint between medial femoral condyle & medial tibial condyle; attached to tibial collateral ligament, coronary ligament, & intercondylar eminence
lateral meniscus	fibrocartilage	intra-articular disc within knee joint between lateral femoral condyle & lateral tibial condyle; attached to coronary ligament & intercondylar eminence
posterior meniscomfemoral ligament		intracapsular ligament connects posterior part of lateral meniscus with lateral surface of medial femoral condyle
suprapatellar bursa	bursa	superior extension of the synovial membrane of the knee joint; passes deep to the quadriceps tendon
prepatellar bursa	bursa	subcutaneous bursa overlying patella
infrapatellar bursa, superficial	bursa	subcutaneous bursa overlying patellar tendon
infrapatellar bursa, deep	bursa	bursa lying between patellar tendon & tibia
interosseous membrane of leg	syndesmosis	connects shafts of tibia & fibula
interosseous ligaments of foot		intracapsular ligaments connecting adjacent tarsal bones
ankle joint	synovial, hinge	articulation between distal end of tibia, medial malleolus, lateral malleolus and talus; reinforced by deltoid ligament (anterior tibiotalar, tibionavicular, tibiocalcaneal, posterior tibiotalar), anterior talofibular, calcaneofibular & posterior talofibular ligaments
anterior tibiofibular ligament		connects distal ends of tibia & fibula anteriorly
posterior tibiofibular ligament		connects distal ends of tibia & fibula posteriorly
deltoid ligament		connects medial malleolus with talus, navicular & calcaneus; its four parts arranged from anterior to posterior: anterior tibiotalar, tibionavicular, tibiocalcaneal, posterior tibiotalar; also known as: medial ligament of ankle
anterior tibiotalar		part of deltoid ligament connecting medial

ligament		malleolus with talus
posterior tibiotalar ligament		part of deltoid ligament connecting medial malleolus with talus posteriorly
tibiocalcaneal ligament		part of deltoid ligament connecting medial malleolus with sustentaculum tali
tibionavicular ligament		part of deltoid ligament connecting medial malleolus with navicular
anterior talofibular ligament		connects lateral malleolus with talus anterolaterally
posterior talofibular ligament		connects lateral malleolus with talus posterolaterally
calcaneofibular ligament		connects lateral malleolus with calcaneus
plantar calcaneonavicular ligament	syndesmosis	connects sustentaculum tali with inferior surface of navicular; also known as: spring ligament
plantar calcaneocuboid ligament	syndesmosis	connects calcaneus & cuboid inferiorly
long plantar ligament	syndesmosis	connects calcaneus with cuboid & bases of lateral 3 metatarsals
tarsometatarsal joints	synovial	reinforced by dorsal & plantar ligaments
metatarsophalangeal joints (5)	synovial	chondyloid joint connecting head of metatarsal with proximal phalanx; reinforced by collateral ligaments
longitudinal arch of the foot	combination of synovial joints & syndesmoses	passes from calcaneus to talus to navicular to cuneiforms to metatarsals; supported by plantar calcaneonavicular ligament & many other ligaments; supported by tendons of tibialis anterior & tibialis posterior mm.
transverse arch of the foot	combination of synovial joints & syndesmoses	passes through distal row of tarsal bones; supported by shape of bones and many ligaments; supported by tendons of fibularis longus & tibialis anterior & tibialis posterior mm.

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## Fasciae of the Lower Limb - Arranged Alphabetically

Structure	Location/Description	Notes
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fascia, crural	deep fascia forming a tubular investment of the leg	crural fascia is continuous with fascia lata at the knee; it is connected to the fibula by anterior and posterior intermuscular septa; it is thickened near the ankle to form extensor and flexor retinacula
fascia, gluteal	deep fascia covering the gluteus medius m. and the gluteus maximus m.	also known as: gluteal aponeurosis
fascia lata	deep fascia forming a tubular investment of the thigh	fascia lata is thickened along the lateral intermuscular septum of the thigh where it is called the iliotibial tract/band; fascia lata is connected to the femur by the lateral and medial intermuscular septa; scarpa's fascia attaches to fascia lata below the inguinal ligament
fascia, pedal	deep fascia forming the investment of the foot	pedal fascia is thin superiorly and thick over the sole, where it is called plantar fascia
fascia, plantar	fascia of the sole of the foot	plantar fascia is thickened over the central part of the sole to form the plantar aponeurosis
fascia, popliteal	deep fascia forming a roof over the popliteal fossa	the most superficial content of the popliteal fossa is the tibial nerve, which lies immediately deep to the popliteal fascia

## Bones of the Lower Limb - Listed in Proximal to Distal Order

Bone	Structure	Description	Notes
pubis		an angulated bone the forms the anterior part of the pelvis	one of three bones that form the os coxae: ilium, ischium, pubis; its body forms 1/5 of the acetabulum; its symphyseal surface unites with the pubis of the opposite side to form the pubic symphysis; the superior and inferior pubic rami participate in the formation of the

			obturator foramen
	body	superolateral portion of the pubis	the body of the pubis forms about 1/5 of the acetabulum
	pubic crest	ridge on the superior border of the superior ramus	attachment of rectus abdominis & pyramidalis mm.
	pubic tubercle	process at the lateral end of pubic crest	attachment point of the medial end of the inguinal ligament
	superior ramus	superior "limb" that passes medially from the body of the pubis	articulates with the superior ramus of the opposite side at the pubic symphysis
	pecten	ridge on superior surface of the superior pubic ramus	attachment point of the pectineal ligament
	inferior ramus	inferior "limb" that passes inferolaterally from the pubic symphysis	articulates with the ischial ramus to form the ischiopubic ramus; attachment site for the root of the penis (clitoris)
	obturator groove	groove on the inferior surface of the superior pubic ramus	marks the area of passage of the obturator vessels and n. in the obturator canal
<b>ischium</b>		the "V"- shaped bone that forms the posteroinferior part of the pelvis	one of the three bones that form the os coxae: ilium, ischium, pubis
	ischial ramus	the limb of the ischium that passes anteriorly and superomedially toward the pubis	it articulates with the inferior ramus of the pubis
	body	the part of the ischium that participates in the formation of the acetabulum	it articulates with the ilium and the pubis at the acetabulum; the body of the ischium forms 2/5 of the acetabulum
	ischial tuberosity	the roughened projection that protrudes	it is the site of attachment of the sacrotuberous ligament; it is the site of origin of the

		posteroinferiorly from the body of the ischium	inferior gemellus m., quadratus femoris m. and the hamstring mm. (semitendinosus, semimembranosus, long head of biceps femoris, ischiocondylar portion of the adductor magnus)
	lesser sciatic notch	the notch located between the ischial tuberosity and the ischial spine	the lesser sciatic notch is converted to the lesser sciatic foramen by the sacrospinous ligament and the sacrotuberous ligament
	ischial spine	the spine that arises just superior to the lesser sciatic notch	it is the site of attachment of the sacrospinous ligament and the site of origin of the superior gemellus m.
<b>ilium</b>		fan-shaped bone that forms the lateral prominence of the pelvis	one of three bones that form the os coxae: ilium, ischium, pubis
	body	the portion of the ilium that participates in the formation of the acetabulum	the body of the ilium forms 2/5 of the acetabulum
	iliac crest	arching superior edge the ilium that forms the rim of the "fan"	attachment for abdominal wall muscles
	iliac fossa	broad depression on the medial surface of the ilium	iliac fossa is part of the false (greater) pelvis
	iliac tubercle	roughened area along the outer edge of the iliac crest	
	anterior superior iliac spine	spine at the anterior end of the iliac crest	lateral attachment of the inguinal ligament
	posterior superior iliac spine	spine at the posterior end of the iliac crest	position marked by a dimpling of the skin
	arcuate line	ridge running from anteroinferior to	inferior boundary of the iliac fossa; marks the plane of



		posterosuperior on the inner surface of the ilium	transition from abdominal cavity to pelvic cavity
<b>sacrum</b>		a triangular bone that is the posterior skeletal element forming the pelvis	it is formed by 5 fused vertebrae; the sacrum and two os coxae bones form the pelvis
	base	the superior part of the sacrum	the base of the sacrum includes the articular surface for the fifth lumbar vertebra and the superior portion of the two ala
	promontory	a projection of the superior part of the sacrum in an anterior direction	the body of the fifth lumbar vertebra sits on the sacral promontory and articulates with it through a symphysis
	ala	the lateral portion of the sacrum	paired; it projects laterally from the body of the sacrum; it represents the fused costal and transverse processes of the first sacral vertebra
	anterior sacral foramina	an opening in the anterior surface of the sacrum	there are four pairs; each transmits the ventral primary ramus of the respective sacral spinal nerve; branches of the lateral sacral aa. Enter the sacral canal through these openings
	posterior sacral foramina	an opening in the posterior surface of the sacrum	there are four pairs; each transmits the dorsal primary ramus of the respective sacral spinal nerve
	sacral canal	the opening in the center of the sacrum	it is the continuation of the vertebral canal at sacral vertebral levels
	sacral hiatus	an opening in the posterior surface of the sacrum in the midline	it is a normal feature that results from the failure of fusion of the laminae of the fifth sacral segment (and sometimes the fourth) during development
	articular surface	the roughened area located on the lateral	this surface articulates with the ilium in the sacroiliac



		surface of the sacrum	articulation
	body	the central portion of the sacrum	the body is equivalent to the bodies of the other vertebra
	base	the superior surface of the sacrum	the base of the sacrum articulates with the fifth lumbar vertebra through an intervertebral disk
<b>coccyx</b>		the most inferior portion of the vertebral column	the coccyx results from the fusion of the four coccygeal vertebrae; it may be a single bone or the first coccygeal vertebra may be separated from the other three; it articulates with the fifth sacral segment; coccygeal vertebrae are reduced in complexity, having no pedicles, laminae or spines
<b>femur</b>		the bone of the thigh	the femur is the longest and strongest bone in the body
	head	smooth, rounded proximal end	the head of the femur articulates with the acetabulum of the pelvis
	fovea capitis femoris	a shallow pit in the head of the femur	it is the attachment site of the ligamentum capitis femoris; a small artery for supply of the head is found within this ligament
	neck	the constricted area distal to the head of the femur	most of the blood supply to the head of the femur courses along the surface of the neck; fractures of the neck of the femur may result in avascular necrosis of the head
	greater trochanter	a large process that projects superiorly from the junction of the neck and shaft of the femur	the greater trochanter is the insertion site of the gluteus medius m., gluteus minimus m., piriformis m. and obturator internus m.
	gluteal tuberosity	a roughened area located on the posterior surface of	it is one of the insertion sites of the gluteus maximus m.

		the femur at the superior end of the lateral lip of the linea aspera	
	lesser trochanter	a large process that projects from the posteromedial surface of the femur just distal to neck	it is the insertion site of the common tendon of the psoas major and iliacus mm. (iliopsoas m.)
	trochanteric fossa	a depression on the medial side of the greater trochanter on its posterior surface where the greater trochanter joins the neck	it is the insertion site of the obturator internus m., superior gemellus m. and inferior gemellus m.
	intertrochanteric line	a ridge on the anterior surface of the femur that connects the greater and lesser trochanters	it is the line of attachment of the fibrous joint capsule
	intertrochanteric crest	a heavy ridge on the posterior surface of the femur that connects the greater and lesser trochanters	the quadratus femoris m. inserts on the intertrochanteric crest
	body	the long slender shaft of the femur	the linea aspera runs the entire length of the posterior surface of the body
	linea aspera	a vertical ridge on posterior surface of the femur	it is the insertion site of the medial (adductor) group of thigh muscles and the origin of the vastus intermedius m. and the short head of the biceps femoris m.
	adductor tubercle	a process that projects superior to the medial epicondyle of the femur	it is the insertion site of the ischiocondylar part of the adductor magnus m.
	medial epicondyle	the enlargement of bone on the medial	it is the attachment site of the tibial collateral ligament of

		side of the femur just superior to the medial condyle	the knee joint
	lateral epicondyle	the enlargement of bone on the lateral side of the femur just superior to the lateral condyle	it is the attachment site of the fibular collateral ligament and the site of origin of the popliteus m.
	medial condyle	the rounded inferior end of the femur on the medial side	it articulates with the medial condyle of the tibia
	lateral condyle	the rounded inferior end of the femur on the lateral side	it articulates with the lateral condyle of the tibia
	intercondylar fossa	the deep depression on the posterior surface of the femur between the condyles	the anterior and posterior cruciate ligaments are located here
	patellar surface	the smooth anterior surface at the inferior end of the femur	it articulates with the posterior surface the patella
<b>patella</b>		the bone that forms the knee cap	the patella is a sesamoid bone in the tendon of the quadriceps femoris muscle; it provides a protective function by withstanding the grinding forces of the quadriceps femoris tendon against the patellar surface of the femur, especially in full knee flexion
<b>tibia</b>		the bone on the medial side of the leg	the tibia is the weight-bearing bone of the leg
	medial condyle	the heavy prominence on the medial side of the proximal end of the tibia	the medial condyle articulates with the medial condyle of the femur; it is larger than the lateral condyle of the tibia
	lateral condyle	the heavy prominence on the lateral side of the	the lateral condyle articulates with the lateral condyle of the femur and with the head of

		proximal end of the tibia	the fibula
	intercondylar eminence	the ridge of bone on the proximal end of the tibia that projects between the condyles	the intercondylar eminence has a medial and a lateral tubercle; it is the attachment site for the cruciate ligaments, medial meniscus and lateral meniscus
	tibial tuberosity	the roughened protuberance on the anterior surface of the tibia located just distal to the condyles	it is the attachment site of the patellar ligament, which represents the insertion of the quadriceps femoris tendon
	body	the long, robust shaft of the tibia	the medial surface of the body of the tibia is subcutaneous throughout its length; when the shin is painfully bumped, the nerve endings are stimulated in the periosteum covering the body of the tibia
	interosseous border	the sharp ridge that runs longitudinally along the junction of the lateral surface and the posterior surface of the tibia	the interosseous membrane attaches to the interosseous border of the tibia
	soleal line	a ridge of bone that descends obliquely from lateral to medial on the posterior surface of the tibia	it is the site of origin of the soleus m.
	medial malleolus	the large bony prominence on the medial side of the ankle	the medial malleolus of the tibia forms the medial side of the ankle joint; it articulates with the medial surface of the talus
<b>fibula</b>		the slender bone on the lateral side of the leg	the fibula is not a weight-bearing bone, it is a muscle attachment bone
	head	the enlarged proximal end of the	it articulates with the lateral condyle of tibia; the fibular

		fibula	collateral ligament of the knee attaches to the head of the fibula
	neck	the constricted portion of the fibula located just inferior to the head	fractures of the neck of the fibula can injure the common fibular n.
	body	the long slender shaft of the fibula	the interosseous membrane attaches to the entire length of the interosseous border of the fibula
	interosseous border	the sharp ridge that runs longitudinally along the medial surface of the fibula	the interosseous membrane attaches to the interosseous border of the fibula
	lateral malleolus	the enlarged distal end of the fibula	the lateral malleolus of the fibula forms the lateral side of the ankle joint; it articulates with the lateral surface of the talus; forcible lateral displacement of the foot can cause the fibula to fracture superior to the lateral malleolus, a condition called a Pott's fracture
<b>tarsal bones</b>		the bones of the ankle	there are seven tarsal bones: talus, calcaneus, navicular, medial cuneiform, intermediate cuneiform, lateral cuneiform, cuboid
<b>talus</b>		the most proximal of the tarsal bones	the talus articulates with the medial malleolus of the tibia and the lateral malleolus of the fibula to form the ankle mortise joint
	body	the proximal part of the talus	its superior (trochlear) part participates in the ankle joint and its inferior part articulates with the calcaneus
	trochlea	the superior portion of the body of the talus that lies between the two malleoli	it has a smooth articular surface; it participates in the formation of the ankle joint

	head	the portion of the talus that projects anteriorly	it articulates with the navicular bone
	neck	the constricted part of the talus located proximal to the head	
<b>calcaneus</b>		the tarsal bone which forms the heel	it is the largest and strongest bone in the foot; a fracture of the calcaneus which separates the tuberosity from the body can be a debilitating injury
	calcaneal tuberosity	the posterior roughened area of the calcaneus which contacts the ground during weight-bearing	it is the insertion site of the calcaneal (Achilles') tendon
	sustentaculum tali	the shelf-like medial projection of bone located inferior to the medial malleolus	it is a shelf of bone that articulates with and supports the talus; it is grooved inferiorly by the tendon of the flexor hallucis longus m.
<b>navicular</b>		the tarsal bone located distal to the talus and proximal to the three cuneiform bones	it articulates with the head of the talus and all three cuneiform bones; it is the attachment site for an important ligament (plantar calcaneonavicular or "spring" ligament) that supports the medial longitudinal arch of the foot
<b>cuneiform, medial</b>		the most medial bone in the distal row of tarsal bones	the cuneiform bones articulate with the navicular bone proximally and the bases of the metatarsal bones distally
<b>cuneiform, middle</b>		the intermediate bone of the three cuneiform bones	the cuneiform bones articulate with the navicular bone proximally and the bases of the metatarsal bones distally
<b>cuneiform, lateral</b>		the bone that is located between the middle cuneiform	the cuneiform bones articulate with the navicular bone proximally and the

		and the cuboid bone	bases of the metatarsal bones distally
<b>cuboid</b>		the most lateral bone in the distal row of tarsal bones	the cuboid bone articulates with the calcaneus proximally and the fourth and fifth metatarsal bones distally
<b>metatarsals</b>		the bones located between the tarsal bones and the phalanges	there are five metatarsal bones in the foot
	base	the proximal end of the metatarsal	it articulates with the distal row of tarsal bones
	body	the slender shaft of the metatarsal	it is also known as the diaphysis
	head	the rounded distal end of the metatarsal	it articulates with the proximal phalanx of the corresponding digit
<b>phalanx (phalanges)</b>		the distal two or three bones in the digits of the foot	there are a total of 14 phalanges in the foot; the great toe has two phalanges (proximal and distal) and each of the other four toes has three phalanges (proximal, middle and distal); phalanx means "line of soldiers"
	base	the proximal end of the phalanx	the base of the proximal phalanx articulates with the head of the corresponding metatarsal bone; the base of the middle or distal phalanx articulates with the head of the next most proximal phalanx
	body	the slender shaft of the phalanx	also known as the diaphysis; the body of the distal phalanx is very short
	head	the distal end of the phalanx	the proximal, middle and distal phalanges each have a head; the head of a proximal or middle phalanx articulates with the base of the next most distal phalanx



## Topographical Anatomy of the Lower Limb - Listed Alphabetically

Structure/Space	Description/Boundaries	Significance
adductor canal	a musculo-fascial canal that contains the large neurovascular bundle of the anterior thigh; its boundaries are: anterior - sartorius m.; lateral - vastus medialis m.; posterior - adductor longus m. and adductor magnus m.; it begins proximally at the inferior angle of the femoral triangle and ends distally at the adductor hiatus	adductor canal contains the femoral a. and v., the saphenous n. and the nerve to the vastus medialis m.; also known as: Hunter's canal, subsartorial canal
adductor hiatus	an opening in the tendon of insertion of the adductor magnus m.; its boundaries are: medial - portion of the tendon of adductor magnus that attaches to the adductor tubercle, lateral - insertion of the adductor magnus into the linea aspera, inferior - femur	femoral a. and v. pass through the adductor hiatus to reach the posterior surface of the knee, where their name changes to popliteal a. and v.
anterior compartment, leg	a connective tissue compartment that contains muscles that dorsiflex the ankle; its boundaries are: tibia, fibula, interosseous membrane, anterior intermuscular septum	anterior compartment of the leg contains the tibialis anterior m., extensor hallucis longus m., extensor digitorum longus m., fibularis tertius m.; it also contains the anterior tibial a. and the deep fibular n.; also known as: extensor compartment of the leg

anterior compartment, thigh	a connective tissue compartment that contains muscles that extend the knee; its boundaries are: anterior and lateral - fascia lata of the thigh; posterior ; femur, medial intermuscular septum and lateral intermuscular septum	anterior compartment of the thigh contains the quadriceps femoris m. and sartorius m.; also known as extensor compartment of the thigh
fascia lata	deep fascia forming a tubular investment of the thigh	fascia lata is thickened laterally to form the iliotibial tract/band; it is connected to the femur by the lateral and medial intermuscular septa which divide the thigh into compartments; Scarpa's fascia attaches to the external surface of the fascia lata inferior to the inguinal ligament
fascia, crural	deep fascia forming a tubular investment of the leg	crural fascia is continuous with the fascia lata at the level of the knee; it is connected to the fibula by the anterior and posterior intermuscular septa; crural fascia is thickened near the ankle to form the extensor and flexor retinacula
fascia, gluteal	deep fascia covering gluteus medius m., it extends between the iliac crest and superolateral border of the gluteus maximus m.	also known as: gluteal aponeurosis
femoral canal	a short diverticulum within the femoral sheath that extends distal to the inguinal ligament on the medial side of the femoral vessels; its boundaries are: medial - lacunar ligament; lateral - fascia on the femoral vein; anterior - inguinal ligament; posterior - fascia on the pectineus m.	femoral canal is the medial compartment of the femoral sheath; it opens into the abdominal cavity superiorly at the femoral ring; it may be the site of a femoral hernia; usually contains a deep inguinal lymph node (gland of Cloquet)
femoral ring	opening into the femoral canal; its boundaries are: medial - lacunar ligament, lateral - fascia on the femoral vein, anterior - inguinal ligament, posterior - fascia on the	if a femoral hernia develops, the herniated gut passes through the femoral ring

	pectineus m.	
femoral triangle	a musculo-fascial triangle on the anterior surface of the thigh; its boundaries are: superior - inguinal ligament, lateral - sartorius m., medial - medial edge of the adductor longus m.	femoral triangle contains the femoral a., v. and n.; textbooks may disagree on the medial boundary of this triangle
Hunter's canal	a musculo-fascial canal that contains the large neurovascular bundle of the anterior thigh; its boundaries are: anterior - sartorius m.; lateral - vastus medialis m.; posterior - adductor longus m. and adductor magnus m.; it begins proximally at the inferior angle of the femoral triangle and ends distally at the adductor hiatus	Hunter's canal contains the femoral a. and v., the saphenous n. and the nerve to the vastus medialis m.; also known as: adductor canal, subsartorial canal
lateral compartment , thigh	a connective tissue compartment that contains the muscles of the gluteal region; it is located posterolateral to the hip joint	lateral compartment of the thigh contains: tensor fasciae latae m., gluteus maximus m., gluteus medius m., gluteus minimus m., piriformis m., superior and inferior gemellus mm., quadratus femoris m.; obturator internus tendon; also known as: gluteal compartment of the thigh
lateral compartment, leg	a connective tissue compartment that contains the muscles that evert the ankle joint; its boundaries are: anterior, lateral and medial - crural fascia; posterior - anterior and posterior intermuscular septa, fibula	lateral compartment of the leg contains: fibularis longus m., fibularis brevis m.; superficial fibular n.; also known as: evtor compartment of the leg
medial compartment, thigh	a connective tissue compartment that contains the muscles that adduct the thigh; its boundaries are: anterior - medial intermuscular septum; posterior - fascia between the medial and posterior compartments; medial - fascial lata; lateral - femur	medial compartment of the thigh contains: pectineus m., adductor longus m., adductor brevis m., adductor magnus m., gracilis m., obturator externus m.; also known as: adductor compartment of the thigh
popliteal fossa	the shallow depression on the posterior surface of the knee; its	popliteal fossa contains: popliteal a. and v. and their

	boundaries are: superomedial - tendons of semimembranosus and semitendinosus mm., superolateral - tendon of biceps femoris m., inferior - medial and lateral heads of the gastrocnemius m.	branches; tibial n, common fibular n., popliteus m.
posterior compartment , leg	a connective tissue compartment that contains the muscles that plantar flex the ankle joint; its boundaries are: anterior - tibia, fibula and interosseous membrane; lateral, medial and posterior - crural fascia	posterior compartment of the leg contains: superficially - gastrocnemius m., soleus m., plantaris m.; deeply - popliteus m., tibialis posterior m., flexor digitorum longus m., flexor hallucis longus m.; it also contains the posterior tibial a. and v. and the tibial n.
posterior compartment, thigh	a connective tissue compartment that contains the muscles that flex the knee joint and extend the hip joint; its boundaries are: anterior - lateral intermuscular septum, femur and fascia between the medial and posterior compartments; lateral, medial and posterior - fascia lata	posterior compartment of the thigh contains: semimembranosus m., semitendinosus m., biceps femoris m.; sciatic nerve; also known as: hamstring compartment
saphenous hiatus	an opening in the fascia lata located inferior to the inguinal ligament and lateral to the pubic tubercle	saphenous hiatus is the site of passage of the greater saphenous vein which joins the femoral vein; it is closed by the cribriform fascia
subsartorial canal	a musculo-fascial canal that contains the large neurovascular bundle of the anterior thigh; its boundaries are: anterior - sartorius m.; lateral - vastus medialis m.; posterior - adductor longus m. and adductor magnus m.; it begins proximally at the inferior angle of the femoral triangle and ends distally at the adductor hiatus	subsartorial canal contains the femoral a. and v., the saphenous n. and the nerve to the vastus medialis m.; also known as: adductor canal, Hunter's canal

## Muscles of the Lower Limb - Listed Alphabetically

Muscle	Origin	Insertion	Action	Innervation	Artery
abductor digiti minimi (foot)	medial and lateral sides of the tuberosity of the calcaneus	lateral side of the base of the proximal phalanx of the 5th digit	abducts the 5th toe; flexes the metatarsophalangeal joint	lateral plantar nerve	lateral plantar a.
abductor hallucis	medial side of the tuberosity of calcaneus	medial side of the base of the proximal phalanx of the great toe (hallux)	abducts the great toe; flexes the metatarsophalangeal joint	medial plantar nerve	medial plantar a.
adductor brevis	inferior pubic ramus	pectineal line and linea aspera (deep to the pectineus and adductor longus mm.)	adducts, flexes, and medially rotates the femur	anterior division of the obturator nerve	obturator a., deep femoral a.
adductor hallucis	oblique head: bases of metatarsals 2-4; transverse head: heads of metatarsals 3-5	lateral side of base of the proximal phalanx of the great toe	adducts the great toe (moves it toward midline of the foot; i.e. toward the 2nd digit)	deep branch of the lateral plantar nerve	plantar arterial arch
adductor longus	medial portion of the superior pubic ramus	linea aspera of the femur	adducts, flexes, and medially rotates the femur	anterior division of the obturator nerve	obturator a., deep femoral a.
adductor magnus	ischiopubic ramus and ischial tuberosity	linea aspera of the femur; the ischiocondylar part inserts on the adductor tubercle of the	adducts, flexes, and medially rotates the femur; extends the femur (ischiocondylar part)	posterior division of the obturator nerve; tibial nerve (ischiocondylar	obturator a., deep femoral a. medial femoral circumfl.

		femur		part)	a.
adductor minimus	lower portion of the inferior pubic ramus	gluteal ridge and upper part of the linea aspera of the femur	adducts and laterally rotates the femur	posterior division of the obturator nerve	obturator a., medial femoral circumfl. a., deep femoral a.
articularis genu	anterior surface of the femur above the patellar surface	articular capsule of the knee	elevates the articular capsule of the knee joint	femoral nerve	descend. genicular a.
biceps femoris	long head: ischial tuberosity; short head: lateral lip of the linea aspera	head of fibula and lateral condyle of the tibia	extends the thigh, flexes the leg	long head: tibial nerve; short head: common fibular (peroneal) nerve	perforating branches of the deep femoral a.
dorsal interosseous (foot)	shafts of adjacent metatarsal bones	bases of the proximal phalanges for digit 2 (both sides) & digits 3,4 (lateral side)	abduct digits 2-4 (move these digits away from midline as defined by a plane passing through the 2nd digit); flex the metatarsophalangeal joints and extend the interphalangeal joints of those digits	deep branch of the lateral plantar nerve	dorsal metatarsal aa.
extensor digitorum brevis	superolateral surface of the calcaneus	extensor expansion of toes 1-4	extends toes 1-4	deep fibular (peroneal) nerve	dorsalis pedis a.
extensor digitorum longus	lateral condyle of the tibia, anterior surface of the fibula, lateral portion of the interosseous membrane	dorsum of the lateral 4 toes via extensor expansions (central slip inserts on base of middle phalanx, lateral slips on base of	extends the metatarsophalangeal, proximal interphalangeal and distal interphalangeal joints of the lateral 4 toes	deep fibular (peroneal) nerve	anterior tibial a.

		distal phalanx)			
extensor hallucis brevis	superolateral surface of the calcaneus	dorsum of base of proximal phalanx of the great toe	extends the great toe	deep fibular (peroneal) nerve	dorsalis pedis a.
extensor hallucis longus	middle half of the anterior surface of the fibula and the interosseous membrane	base of the distal phalanx of the great toe	extends the metatarsophalangeal interphalangeal joints of the great toe	deep fibular (peroneal) nerve	anterior tibial a.
fibularis (peroneus) brevis	lower one third of the lateral surface of the fibula	tuberosity of the base of the 5th metatarsal	extends (plantar flexes) and everts the foot	superficial fibular (peroneal) nerve	fibular (peroneal) a.
fibularis (peroneus) longus	upper two-thirds of the lateral surface of the fibula	after crossing the plantar surface of the foot deep to the intrinsic muscles, it inserts on the medial cuneiform and the base of the 1st metatarsal bone	extends (plantar flexes) and everts the foot	superficial fibular (peroneal) nerve	fibular (peroneal) a.
fibularis (peroneus) tertius	distal part of the anterior surface of the fibula	dorsum of the shaft of the 5th metatarsal bone	everts the foot	deep fibular (peroneal) nerve	anterior tibial a.
flexor digiti minimi brevis (foot)	base of 5th metatarsal bone	lateral side of base of proximal phalanx of 5th digit	flexes the metatarsophalangeal joint of the 5th digit	lateral plantar nerve	lateral plantar a.
flexor digitorum brevis	tuberosity of the calcaneus, plantar	base of the middle phalanx of digits 2-5	flexes the metatarsophalangeal & proximal	medial plantar nerve	medial & lateral plantar a.



	aponeurosis, intermuscular septae	after splitting to allow passage of the flexor digitorum longus tendons	interphalangeal joints of digits 2-5		
flexor digitorum longus	middle half of the posterior surface of the tibia	bases of the distal phalanges of digits 2-5	flexes the metatarsophalangeal, proximal interphalangeal and distal interphalangeal joints of digits 2-5; plantar flexes the foot	tibial nerve	tibial a.
flexor hallucis brevis	cuboid, lateral cuneiform, medial side of the first metatarsal	medial belly: medial side of proximal phalanx of the great toe; lateral belly: lateral side of the proximal phalanx of the great toe	flexes the metatarsophalangeal joint of the great toe	medial plantar nerve (lateral belly occasionally receives innervation from the lateral plantar nerve)	medial plantar a.
flexor hallucis longus	lower 2/3 of the posterior surface of the fibula	base of the distal phalanx of the great toe	flexes the metatarsophalangeal and proximal interphalangeal joints of the great toe; plantar flexes the foot	tibial nerve	fibular (peroneal) a. and tibial a.
gastrocnemius	femur; medial head: above the medial femoral condyle; lateral head: above the lateral femoral condyle	dorsum of the calcaneus via the calcaneal (Achilles') tendon	flexes leg; plantar flexes foot	tibial nerve	sural aa. (from the popliteal a.), posterior tibial a.
gemellus, inferior	ischial tuberosity	obturator internus tendon	laterally rotates the femur	nerve to the quadratus femoris m.	inferior gluteal a.
gemellus, superior	ischial spine	obturator internus tendon	laterally rotates the femur	nerve to the obturator	inferior gluteal a.

				internus m.	
gluteus maximus	posterior gluteal line, posterior surface of sacrum and coccyx, sacrotuberous ligament	upper fibers: iliotibial tract; lowermost fibers: gluteal tuberosity of the femur	extends the thigh; laterally rotates the femur	inferior gluteal nerve	superior and inferior gluteal a.
gluteus medius	external surface of the ilium between the posterior and anterior gluteal lines	greater trochanter of the femur	abducts the femur; medially rotates the thigh	superior gluteal nerve	superior gluteal a.
gluteus minimus	external surface of the ilium between the anterior and inferior gluteal lines	greater trochanter of the femur	abducts the femur; medially rotates the thigh	superior gluteal nerve	superior gluteal a.
gracilis	pubic symphysis and the inferior pubic ramus	medial surface of the tibia (via pes anserinus)	adducts the thigh, flexes and medially rotates the thigh, flexes the leg	anterior division of the obturator nerve	obturator a.
iliacus	iliac fossa and iliac crest; ala of sacrum	lesser trochanter of the femur	flexes the thigh; if the thigh is fixed it flexes the pelvis on the thigh	femoral nerve	iliolumbar a.
iliopsoas	iliac fossa; bodies and transverse processes of lumbar vertebrae	lesser trochanter of the femur	flexes the thigh; flexes and laterally bends the lumbar vertebral column	branches of the ventral primary rami of spinal nerves L2-L4; branches of the femoral nerve	iliolumbar a.

inferior gemellus	ischial tuberosity	obturator internus tendon	laterally rotates the femur	nerve to the quadratus femoris m.	inferior gluteal a.
interosseous, dorsal (foot)	shafts of adjacent metatarsal bones	bases of the proximal phalanges for digit 2 (both sides) & digits 3,4 (lateral side)	abduct digits 2-4 (move these digits away from midline as defined by a plane passing through the 2nd digit); flex the metatarsophalangeal joints and extend the interphalangeal joints of those digits	deep branch of the lateral plantar nerve	dorsal metatarsal aa.
interosseous, plantar	base and medial side of metatarsals 3-5	bases of proximal phalanges and extensor expansions of digits 3-5	adduct digits 3-5 (move these digits toward the midline of the foot as defined by a plane through the second digit); flex the metacarpophalangeal and extend interphalangeal joints of digits 3-5	deep branch of the lateral plantar nerve	plantar metatarsal aa.
lumbricals (foot)	tendons of the flexor digitorum longus	medial side of the extensor expansion of digits 2-5	flex the metatarsophalangeal joint, extend the proximal interphalangeal & distal interphalangeal joints of digits 2-5	medial (1st) lumbrical: medial plantar nerve; lateral three lumbricals: lateral plantar nerve	medial and lateral plantar a.
obturator externus	the external surface of the obturator membrane and the superior and inferior pubic rami	trochanteric fossa of the femur	laterally rotates the thigh	obturator nerve	obturator a.
obturator internus	the internal surface of the obturator membrane and margin of the obturator foramen	greater trochanter on its medial surface above the trochanteric fossa	laterally rotates and abducts the thigh	nerve to the obturator internus m.	obturator a.

pectineus	pecten of the pubis	pectineal line of the femur	adducts, flexes, and medially rotates the thigh	femoral nerve and possibly the anterior division of the obturator nerve	medial femoral circumfl a.
peroneus mm. (SEE fibularis mm.)					
piriformis	anterior surface of sacrum	upper border of greater trochanter of femur	laterally rotates and abducts thigh	ventral rami of S1-S2	
plantar interosseous	base and medial side of metatarsals 3-5	bases of proximal phalanges and extensor expansions of digits 3-5	adduct digits 3-5 (move these digits toward the midline of the foot as defined by a plane through the second digit); flex the metacarpophalangeal and extend interphalangeal joints of digits 3-5	deep branch of the lateral plantar nerve	plantar metatars aa.
plantaris	above the lateral femoral condyle (above the lateral head of gastrocnemius)	dorsum of the calcaneus medial to the calcaneal tendon	flexes the leg; plantar flexes the foot	tibial nerve	popliteal
popliteus	lateral condyle of the femur	posterior surface of the tibia above soleal line	flexes and rotates the leg medially (with the foot planted, it rotates the thigh laterally)	tibial nerve	popliteal

psoas major	bodies and transverse processes of lumbar vertebrae	lesser trochanter of femur (with iliacus) via iliopsoas tendon	flexes the thigh; flexes & laterally bends the lumbar vertebral column	branches of the ventral primary rami of spinal nerves L2-L4	subcostal a., lumbar a.
psoas minor	bodies of the T12 & L1 vertebrae	iliopubic eminence at the line of junction of the ilium and the superior pubic ramus	flexes & laterally bends the lumbar vertebral column	branches of the ventral primary rami of spinal nerves L1-L2	lumbar a.
quadratus femoris	lateral border of the ischial tuberosity	quadrate line of the femur below the intertrochanteric crest	laterally rotates the thigh	nerve to the quadratus femoris m.	inferior gluteal a.
quadratus plantae	anterior portion of the calcaneus and the long plantar ligament	tendons of the flexor digitorum longus m.	assists the flexor digitorum longus in flexing the toes	lateral plantar nerve	lateral plantar a.
quadriceps femoris	anterior surface of the femur and the anterior side of the medial and lateral intermuscular septa	tibial tuberosity via the patellar ligament	extends the knee; rectus femoris flexes the thigh	femoral nerve	lateral circumflex femoral a. deep femoral a.
rectus femoris	straight head: anterior inferior iliac spine; reflected head: above the superior rim of the acetabulum	patella and tibial tuberosity (via the patellar ligament)	extends the leg, flexes the thigh	femoral nerve	lateral circumflex femoral a.
sartorius	anterior superior iliac spine	medial surface of the tibia (pes anserinus)	flexes, abducts and laterally rotates the thigh; flexes leg	femoral nerve	lateral femoral circumflex a., saphenous a.

semimembranosus	upper, outer surface of the ischial tuberosity	medial condyle of the tibia	extends the thigh, flexes the leg	tibial nerve	perforating branches of the deep femoral a.
semitendinosus	lower, medial surface of ischial tuberosity (common tendon with biceps femoris m.)	medial surface of tibia (via pes anserinus)	extends the thigh, flexes the leg	tibial nerve	perforating branches of the deep femoral a.
soleus	posterior surface of head and upper shaft of the fibula, soleal line of the tibia	dorsum of the calcaneus via the calcaneal (Achilles') tendon	plantar flexes the foot	tibial nerve	posterior tibial a.
superior gemellus	ischial spine	obturator internus tendon	laterally rotates the femur	nerve to the obturator internus m.	inferior gluteal a.
tensor fasciae latae	anterior part of the iliac crest, anterior superior iliac spine	iliotibial tract	flexes, abducts, and medially rotates the thigh	superior gluteal nerve	superior gluteal a.
tibialis anterior	lateral tibial condyle and the upper lateral surface of the tibia	medial surface of the medial cuneiform and the 1st metatarsal	dorsiflexes and inverts the foot	deep fibular (peroneal) nerve	anterior tibial a.
tibialis posterior	interosseous membrane, posteromedial surface of the fibula, posterolateral surface of the tibia	tuberosity of the navicular and medial cuneiform, metatarsals 2-4	plantar flexes the foot; inverts the foot	tibial nerve	fibular (peroneal) a. and tibial a.
vastus intermedius	anterior and lateral surface of the femur	patella	extends the leg	femoral nerve	lateral femoral circumflex a.

vastus lateralis	lateral intermuscular septum, lateral lip of the linea aspera and the gluteal tuberosity	patella and medial patellar retinaculum	extends leg	femoral nerve	lateral femoral circumflex a., perforating branches of the deep femoral a.
vastus medialis	medial intermuscular septum, medial lip of the linea aspera	patella and medial patellar retinaculum	extends leg	femoral nerve	lateral femoral circumflex a.

### Nerves of the Lower Limb - Listed Alphabetically

Nerve	Source	Branches	Motor	Sensory	Notes
anterior femoral cutaneous n.	femoral	no named branches	sympathetic motor innervation to skin	skin of the anterior thigh	cutaneous nn. carry postganglionic sympathetic axons to skin
cluneal, inferior	posterior femoral cutaneous n.	no named branches	none	skin of the lower part of the buttock	"clunus" is a Latin word meaning buttock
cluneal, middle	lateral cutaneous branches of the dorsal primary rami of spinal nerves S1-3	no named branches	none	skin of the intermediate medial portion of the buttock	"clunus" is a Latin word meaning buttock
cluneal, superior	lateral cutaneous branches of the dorsal primary rami of spinal nerves S1-3	no named branches	none	skin of the superomedial portion of the buttock	"clunus" is a Latin word meaning buttock
coccygeal plexus	ventral primary rami of spinal nerves S4, S5, C1	anococcygeal n.	none	skin of the region overlying the coccyx	only part of the S4 ventral primary ramus is contributed to the coccygeal



					plexus
common fibular n.	sciatic n.	lateral sural cutaneous n., superficial and deep fibular nn.	superficial fibular n.: muscles of the lateral compartment of the leg (fibularis longus and brevis mm.); deep fibular n.: muscles of the anterior compartment of the leg (tibialis anterior m., extensor hallucis longus m., extensor digitorum longus m., fibularis tertius m.) and muscles of the dorsum of the foot (extensor digitorum brevis m. and extensor hallucis brevis m.)	superficial fibular n.: distal 1/3 of the anterior surface of the leg, dorsum of the foot excluding the web between the great toe and the 2nd toe and distal interphalangeal segments of all toes; deep fibular n.: skin of the web between the great toe and the 2nd toe	"peroneal" is old terminology which has been replaced by "fibular"
common plantar digital nn.	medial plantar n. (1st-3rd); superficial br. of the lateral plantar n. (4th)	proper plantar digital nn.	1st lumbrical m.	skin of the plantar surface of the toes (except the medial side of the great toe and the lateral side of the 5th toe)	the dorsal surfaces of the distal tips of the toes (nail bed regions) are supplied by the proper plantar digital brs. of these nn.
deep fibular n.	common fibular n.	one proper digital br.	muscles of the anterior compartment of the leg (tibialis anterior m., extensor hallucis longus m., extensor digitorum longus m., fibularis tertius m.) and muscles of the	skin of the web between the great toe and the 2nd toe	"peroneal" is old terminology which has been replaced by "fibular"; anterior compartment syndrome - trauma to the anterior side of the leg can

			dorsum of the foot (extensor digitorum brevis m. and extensor hallucis brevis m.)		result in pressure buildup in the anterior compartment (from swelling or bleeding) that can damage the deep fibular n., resulting in "foot drop"
digital, common plantar	medial plantar n. (1st-3rd); superficial br. of the lateral plantar n. (4th)	proper plantar digital nn.	1st lumbrical m.	skin of the plantar surface of the toes (except the medial side of the great toe and the lateral side of the 5th toe)	the dorsal surfaces of the distal tips of the toes (nail bed regions) are supplied by the proper plantar digital brs. of these nn.
digital, proper plantar	common plantar digital; medial plantar n. (to the medial side of the great toe); superficial br. of the lateral plantar n. (to the lateral side of the 5th toe)	no named branches	flexor hallucis brevis m. (from the proper plantar digital n. on the medial side of the great toe)	skin of the plantar surface of the toes and dorsal surface of the distal interphalangeal segment	the nail bed is supplied by the proper plantar digital nn.
femoral cutaneous, anterior	femoral	no named branches	sympathetic motor innervation to skin	skin of the anterior thigh	cutaneous nn. carry postganglionic sympathetic axons to skin
femoral cutaneous, lateral	lumbar plexus (ventral primary rami of spinal nerves L2-L3)	anterior & posterior brs.	sympathetic motor innervation to skin	skin of the lateral thigh	cutaneous nn. carry postganglionic sympathetic axons to skin
femoral cutaneous, posterior	sacral plexus (ventral primary rami	inferior cluneal nn.; perineal br.	sympathetic motor innervation to skin	skin of the lower buttock & posterior	cutaneous nn. carry postganglionic

	of spinal nerves S1-S3)			thigh	sympathetic axons to skin
femoral n.	lumbar plexus (ventral primary rami of spinal nerves L2-L4)	anterior femoral cutaneous brs., nn. to: sartorius m., rectus femoris m., vastus lateralis m., vastus intermedius m., vastus medialis m., pectineus m.	sartorius, rectus femoris, vastus lateralis, vastus intermedius, vastus medialis, pectineus	skin of anterior thigh	passes under inguinal ligament lateral to femoral a.
fibular, common	sciatic n.	lateral sural cutaneous n., superficial and deep fibular nn.	superficial fibular n.: muscles of the lateral compartment of the leg (fibularis longus and brevis mm.); deep fibular n.: muscles of the anterior compartment of the leg (tibialis anterior m., extensor hallucis longus m., extensor digitorum longus m., fibularis tertius m.) and muscles of the dorsum of the foot (extensor digitorum brevis m. and extensor hallucis brevis m.)	superficial fibular n.: distal 1/3 of the anterior surface of the leg, dorsum of the foot excluding the web between the great toe and the 2nd toe and distal interphalangeal segments of all toes; deep fibular n.: skin of the web between the great toe and the 2nd toe	"peroneal" is old terminology which has been replaced by "fibular"
fibular, deep	common fibular n.	one proper digital br.	muscles of the anterior compartment of the leg (tibialis anterior m., extensor hallucis longus m., extensor	skin of the web between the great toe and the 2nd toe	"peroneal" is old terminology which has been replaced by "fibular"; anterior compartment

			digitorum longus m., fibularis tertius m.) and muscles of the dorsum of the foot (extensor digitorum brevis m. and extensor hallucis brevis m.)		syndrome - trauma to the anterior side of the leg can result in pressure buildup in the anterior compartment (from swelling or bleeding) that can damage the deep fibular n., resulting in "foot drop"
fibular, superficial	common fibular n.	medial dorsal cutaneous n. to the medial side of the foot; dorsal digital nn. to the lateral 3 toes	muscles of the lateral compartment of the leg (fibularis longus and brevis mm.)	distal 1/3 of the anterior surface of the leg; dorsum of the foot excluding the skin of the web between the great toe and the 2nd toe and the distal interphalangeal segments of all toes	"peroneal" is old terminology which has been replaced by "fibular"; the nail beds are supplied by nerves from the plantar surface of the foot
genito femoral n.	lumbar plexus (ventral primary rami of spinal nerves L1-L2)	genital br., femoral br.	cremaster m.	skin of the anterior scrotum/labia majora & upper medial thigh	genito femoral n. lies on the anterior surface of the psoas major in the abdomen; the genital br. passes through the deep inguinal ring and inguinal canal; brushing the thigh elicits an elevation of the testis via the cremasteric reflex
gluteal,	sacral plexus	no named	gluteus maximus	none	inferior gluteal

inferior	(ventral primary rami of spinal nerves L5, S1-S2)	branches	m.		n. passes through the greater sciatic foramen inferior to the piriformis m.
gluteal, superior	sacral plexus (ventral primary rami of spinal nerves L4-L5, S1)	superior & inferior brs.	gluteus medius m., gluteus minimus m., tensor fasciae latae m.	none	superior gluteal n. passes through the greater sciatic foramen superior to the piriformis m.
lateral femoral cutaneous n.	lumbar plexus (ventral primary rami of spinal nerves L2-L3)	anterior & posterior brs.	sympathetic motor innervation to skin	skin of the lateral thigh	cutaneous nn. carry postganglionic sympathetic axons to skin
lateral plantar n.	tibial n.	superficial and deep branches	quadratus plantae m., abductor digiti minimi m., flexor digiti minimi brevis m., lateral 3 lumbrical mm., adductor hallucis m., plantar & dorsal interosseous mm.	skin of the lateral side of the plantar surface of the foot; skin of the plantar surface of the lateral 1 1/2 toes (and the nail bed of these toes)	lateral plantar n. accompanies the lateral plantar a. though the sole of the foot
lateral sural cutaneous n.	common fibular n.	fibular communicating br.	none	skin of the lateral side of the leg	contains postganglionic sympathetic axons for supply of sweat glands, arrector pili mm. and blood vessels
lumbar n.	ventral primary rami of spinal nerves L1-L5	contributes to the formation of the lumbar and sacral plexuses	numerous: see lumbar and sacral plexuses	numerous: see lumbar and sacral plexuses	lumbar nn. enter into the formation of the lumbar and sacral plexuses and do not give branches directly to

					muscles or skin
lumbar plexus	ventral primary rami of spinal nerves L1-L4	branches of the lumbar plexus: iliohypogastric n., ilioinguinal n., genitofemoral n., lateral femoral cutaneous n., femoral n., obturator n., lumbosacral trunk (considered to be part of sacral plexus), brs. to the psoas major and minor mm., branches to the quadratus lumborum m.	muscles of the lower abdominal wall; cremaster m., psoas major and minor mm., quadratus lumborum m., iliacus m.; muscles of the anterior and medial thigh and hip	skin of the lower abdominal wall, skin of the anterior scrotum/labium majus, skin of the anterior and medial thigh and lateral hip	lumbar plexus is noted for its variable branching pattern of nerves that supply the abdominal wall
lumbosacral plexus	ventral primary rami of spinal nerves L4-S4	branches of the lumbosacral plexus: iliohypogastric n., ilioinguinal n., genitofemoral n., lateral femoral cutaneous n., femoral n., obturator n., lumbosacral trunk (considered to be part of sacral plexus), brs. to the psoas major and minor mm., branches to the quadratus	muscles of the lower abdominal wall; cremaster m., psoas major and minor mm., quadratus lumborum m., iliacus m.; muscles of the anterior and medial thigh and hip, muscles of the pelvic & urogenital diaphragm, posterior hip, posterior thigh, leg and foot	skin of the lower abdominal wall, skin of the anterior scrotum/labium majus, skin of the anterior and medial thigh and lateral hip' skin of the perineum, posterior thigh, leg and foot	also known as: lumbar & sacral plexuses

		lumborum m., superior & inferior gluteal nn., n. to the obturator internus m., n. to the quadratus femoris m., sciatic n., n. to the piriformis m., posterior femoral cutaneous n., pudendal n., n. to the pelvic diaphragm, pelvic splanchnic nn.			
lumbosacral trunk	part of the ventral primary ramus of L4 united with the ventral primary ramus of L5	no named branches; it contributes to the formation of the sacral plexus	muscles of the hip and posterior thigh	see sacral plexus	the lumbosacral trunk is not considered to be part of the lumbar plexus
medial sural cutaneous n.	tibial n.	no named branches	none	skin of the posterior surface of the leg; skin of the lateral side of the foot	unites with fibular communicating br. to form the sural n.
obturator internus m., n. to	sacral plexus (ventral primary rami of spinal nerves L5-S2 )	n. to the superior gemellus m.	obturator internus m., superior gemellus m.	none	nerve to obturator internus m. crosses the ischial spine and enters the ischioanal fossa by passing through the lesser sciatic foramen
obturator n.	lumbar plexus (ventral primary rami of spinal	anterior and posterior brs.	muscles of the medial thigh: adductor longus m., adductor	skin of the lower medial thigh	obturator n. passes through the obturator canal



	nerves L2-L4)		brevis m. and adductor magnus m., gracilis m., obturator externus m.		
perforating cutaneous n.	sacral plexus (ventral primary rami of spinal nerves S2-3)	no named branches	none	skin of the inferomedial buttock	perforating cutaneous n. pierces the sacrotuberous ligament
peroneal, common	SEE: fibular, common	.	.	.	"peroneal" is old terminology which has been replaced by fibular
peroneal, deep	SEE: fibular, deep	.	.	.	"peroneal" is old terminology which has been replaced by fibular
peroneal, superficial	SEE: fibular, superficial	.	.	.	"peroneal" is old terminology which has been replaced by fibular
plantar digital, common	medial plantar n. (1st-3rd); superficial br. of the lateral plantar n. (4th)	proper plantar digital nn.	1st lumbrical m.	skin of the plantar surface of the toes (except the medial side of the great toe and the lateral side of the 5th toe)	the dorsal surfaces of the distal tips of the toes (nail bed regions) are supplied by the proper plantar digital brs. of these nn.
plantar digital, proper	common plantar digital; medial plantar n. (to the medial side of the great toe); superficial br.	no named branches	flexor hallucis brevis m. (from the proper plantar digital n. on the medial side of the great toe)	skin of the plantar surface of the toes and dorsal surface of the distal interphalangeal segment	the nail bed is supplied by the proper plantar digital nn.

	of the lateral plantar n. (to the lateral side of the 5th toe)				
plantar, lateral	tibial n.	superficial and deep branches	quadratus plantae m., abductor digiti minimi m., flexor digiti minimi brevis m., lateral 3 lumbrical mm., adductor hallucis m., plantar & dorsal interosseous mm.	skin of the lateral side of the plantar surface of the foot; skin of the plantar surface of the lateral 1 1/2 toes (and the nail bed of these toes)	lateral plantar n. accompanies the lateral plantar a. though the sole of the foot
plantar, medial	tibial n.	plantar cutaneous brs.; proper plantar digital n. (medial side of the great toe); common plantar digital nn. (1st-3rd)	abductor hallucis m., flexor hallucis brevis m., flexor digitorum brevis m., 1st lumbrical m.	skin of the medial side of the plantar surface of the foot; skin of the plantar surface of the medial 3 1/2 toes (and the nail bed of these toes)	medial plantar n. accompanies the medial plantar a. though the sole of the foot
plexus, lumbar	ventral primary rami of spinal nerves L1-L4	branches of the lumbar plexus: iliohypogastric n., ilioinguinal n., genitofemoral n., lateral femoral cutaneous n., femoral n., obturator n., lumbosacral trunk (considered to be part of sacral plexus), brs. to the psoas major and minor mm., branches to the	muscles of the lower abdominal wall; cremaster m., psoas major and minor mm., quadratus lumborum m., iliacus m.; muscles of the anterior and medial thigh and hip	skin of the lower abdominal wall, skin of the anterior scrotum/labium majus, skin of the anterior and medial thigh and lateral hip	lumbar plexus is noted for its variable branching pattern of nerves that supply the abdominal wall

		quadratus lumborum m.			
plexus, lumbosacral	ventral primary rami of spinal nerves L4-S4	branches of the lumbosacral plexus: iliohypogastric n., ilioinguinal n., genitofemoral n., lateral femoral cutaneous n., femoral n., obturator n., lumbosacral trunk (considered to be part of sacral plexus), brs. to the psoas major and minor mm., branches to the quadratus lumborum m., superior & inferior gluteal nn., n. to the obturator internus m., n. to the quadratus femoris m., sciatic n., n. to the piriformis m., posterior femoral cutaneous n., pudendal n., n. to the pelvic diaphragm, pelvic splanchnic nn.	muscles of the lower abdominal wall; cremaster m., psoas major and minor mm., quadratus lumborum m., iliacus m.; muscles of the anterior and medial thigh and hip, muscles of the pelvic & urogenital diaphragm, posterior hip, posterior thigh, leg and foot	skin of the lower abdominal wall, skin of the anterior scrotum/labium majus, skin of the anterior and medial thigh and lateral hip' skin of the perineum, posterior thigh, leg and foot	also known as: lumbar & sacral plexuses
plexus, sacral	lumbosacral trunk (ventral primary rami of spinal	superior & inferior gluteal nn., n. to obturator	muscles of the pelvic diaphragm; muscles of the urogenital	skin of the perineum, posterior thigh, leg and foot	the sacral plexus is often grouped with the lumbar

	nerves L4-L5), ventral primary rami of spinal nerves S1-S4	internus m., n. to quadratus femoris m., sciatic n., n. to piriformis, posterior femoral cutaneous n., pudendal n., n. to pelvic diaphragm, pelvic splanchnic nn.	diaphragm; muscles of the posterior hip, posterior thigh, leg and foot	(excluding the medial side of the leg and foot)	plexus as the "lumbosacral plexus"
posterior femoral cutaneous n.	sacral plexus (ventral primary rami of spinal nerves S1-S3)	inferior cluneal nn.; perineal br.	sympathetic motor innervation to skin	skin of the lower buttock & posterior thigh	cutaneous nn. carry postganglionic sympathetic axons to skin
proper plantar digital nn.	common plantar digital; medial plantar n. (to the medial side of the great toe); superficial br. of the lateral plantar n. (to the lateral side of the 5th toe)	no named branches	flexor hallucis brevis m. (from the proper plantar digital n. on the medial side of the great toe)	skin of the plantar surface of the toes and dorsal surface of the distal interphalangeal segment	the nail bed is supplied by the proper plantar digital nn.
quadratus femoris m., n. to	sacral plexus (ventral primary rami of spinal nerves L4-L5, S1)	n. to the inferior gemellus m.	quadratus femoris m., inferior gemellus m.	none	nerve to the quadratus femoris m. passes anterior to the obturator internus tendon
sacral plexus	lumbosacral trunk (ventral primary rami of spinal nerves L4-L5), ventral primary rami of spinal nerves S1-S4	superior & inferior gluteal nn., n. to obturator internus m., n. to quadratus femoris m., sciatic n., n. to piriformis, posterior femoral cutaneous n.,	muscles of the pelvic diaphragm; muscles of the urogenital diaphragm; muscles of the posterior hip, posterior thigh, leg and foot	skin of the perineum, posterior thigh, leg and foot (excluding the medial side of the leg and foot)	the sacral plexus is often grouped with the lumbar plexus as the "lumbosacral plexus"



superior gluteal n.	sacral plexus (ventral primary rami of spinal nerves L4-L5, S1)	superior & inferior brs.	gluteus medius m., gluteus minimus m., tensor fasciae latae m.	none	superior gluteal n. passes through the greater sciatic foramen superior to the piriformis m.
sural cutaneous, lateral	common fibular n.	fibular communicating br.	none	skin of the lateral side of the leg	contains postganglionic sympathetic axons for supply of sweat glands, arrector pili mm. and blood vessels
sural cutaneous, medial	tibial n.	no named branches	none	skin of the posterior surface of the leg; skin of the lateral side of the foot	unites with fibular communicating br. to form the sural n.
sural n.	formed by the union of the fibular communicating br. of the lateral sural cutaneous n. and the medial sural cutaneous nn.	lateral calcaneal brs., lateral dorsal cutaneous n. of the foot	none	skin of the posterior surface of the lower leg; skin of the lateral side of the foot	sural n. courses posterior to the lateral malleolus at the ankle with the lesser saphenous v.
tibial n.	sciatic n.	medial sural cutaneous n., medial calcaneal brs., medial and lateral plantar nn.	semimembranosus m., semitendinosus m., long head of biceps femoris m., ischiocondylar portion of adductor magnus m.; mm. of the superficial and deep posterior compartments of the leg (gastrocnemius m., soleus m.,	skin of the plantar surface of the foot and toes; skin of the dorsal surface of the distal toes (nail bed region)	tibial n. is the larger of the two divisions of the sciatic n.

			plantaris m., tibialis posterior m., flexor hallucis longus m., flexor digitorum longus m.); muscles of the plantar side of the foot		
to obturator internus m.	sacral plexus (ventral primary rami of spinal nerves L5-S2 )	n. to the superior gemellus m.	obturator internus m., superior gemellus m.	none	nerve to obturator internus m. crosses the ischial spine and enters the ischioanal fossa by passing through the lesser sciatic foramen
to quadratus femoris m.	sacral plexus (ventral primary rami of spinal nerves L4-L5, S1)	n. to the inferior gemellus m.	quadratus femoris m., inferior gemellus m.	none	nerve to the quadratus femoris m. passes anterior to the obturator internus tendon

## Arteries of the Lower Limb

Artery	Source	Branches	Supply to	Notes
anterior lateral malleolar	anterior tibial a.	no named branches	lateral side of the ankle	anterior lateral malleolar a. anastomoses with the posterior lateral malleolar a. and the perforating br. of the fibular a.
anterior medial malleolar	anterior tibial a.	no named branches	medial side of the ankle	anterior medial malleolar a. anastomoses with the posterior medial malleolar a.



anterior tibial	popliteal a.	anterior tibial recurrent a., posterior tibial recurrent a., anterior malleolar a., medial malleolar a., lateral malleolar a., dorsalis pedis a.	anterior leg; dorsum of foot and deep foot	anterior tibial a. becomes continuous with the dorsalis pedis a.; the name change occurs at the level of the ankle joint
anterior tibial recurrent	anterior tibial a.	no named branches	anterior side of the knee and adjacent muscles	anterior tibial recurrent a. anastomoses with the genicular aa. to participate in the formation of the genicular anastomosis
aorta, abdominal	the continuation of the descending thoracic aorta	inferior phrenic aa. (2), celiac trunk, middle suprarenal aa. (2), lumbar aa. (4 pairs), superior mesenteric a., renal aa. (2), testicular/ovarian aa. (2), inferior mesenteric a., median sacral a., common iliac aa. (2)	abdominal wall; gastrointestinal tract; body below the level of the respiratory diaphragm	abdominal aorta passes posterior to the diaphragm (aortic hiatus) at the level of the T12 vertebral body
arch, plantar arterial	lateral plantar a.	plantar metatarsal aa. (4)	deep foot; its plantar metatarsal brs. and their brs. supply the toes, including the dorsum of the distal phalangeal segment	plantar arterial arch anastomoses with the deep plantar br. of the dorsalis pedis a.
arcuate	dorsalis pedis a.	dorsal metatarsal aa. (3)	dorsum of the foot, excluding the pollex and the distal phalangeal segments of the digits	arcuate a. anastomoses with the lateral tarsal a.

circumflex femoral, lateral	deep femoral a.	ascending br., transverse br., descending br.	lateral thigh and hip	lateral circumflex femoral a. arises from the femoral a. in ~14% of cases
circumflex femoral, medial	deep femoral a.	ascending br., descending br.	medial thigh and hip	medial circumflex femoral a. arises from the femoral a. in ~20% of cases
circumflex fibular	anterior tibial	unnamed muscular branches	proximal portion of lateral leg	arises from the tibial a. before the tibial a. pierces the interosseous membrane
circumflex iliac, superficial	femoral a.	unnamed muscular branches	superficial fascia of lower abdomen and thigh	superficial circumflex iliac a. crosses the upper thigh parallel to the inguinal ligament
deep external pudendal	femoral a.	unnamed muscular branches	origins of pectineus m., adductor longus m.; scrotum/labium majus	deep external pudendal a. may arise from the medial circumflex femoral a.
deep femoral	femoral a.	medial circumflex femoral a., lateral circumflex femoral a., perforating aa. (3 or 4)	hip joint, proximal thigh, posterior thigh	deep femoral a. is the primary blood supply to muscles of the posterior compartment of the thigh
deep plantar	dorsalis pedis	plantar metatarsal aa. (4)	deep foot; its plantar metatarsal brs. and their brs. supply the toes, including the dorsum of the distal phalangeal segment	anastomoses with lateral plantar a. to form the plantar arterial arch; the branches mentioned at left arise from the plantar arterial

				arch
descending genicular	femoral a.	saphenous br., articular brs.	skin and superficial structures of the medial aspect of the knee and upper leg	descending genicular a. anastomoses with the genicular brs. of the popliteal a.
digital, proper plantar	plantar metatarsal a., from the plantar arterial arch	no named branches	plantar aspect of each digit	proper plantar digital aa. supply the dorsum of the distal phalangeal segment and nail bed
dorsal digital, of foot	dorsal metatarsal a.	no named branches	dorsal aspect of 1/2 digit, excluding the distal phalangeal segment	dorsal digital aa. do not supply the nail bed
dorsal metatarsal	dorsalis pedis (1st), arcuate (2nd-4th)	dorsal digital aa. (2)	dorsum of digits, excluding the distal phalangeal segment	each dorsal metatarsal a. gives off a perforating br. that anastomoses with the plantar arterial arch
dorsalis pedis	anterior tibial a.	lateral tarsal a., medial tarsal a., arcuate a., 1st dorsal metatarsal a., deep plantar a.	dorsal aspect of the foot;	dorsalis pedis a. anastomoses with the plantar arterial arch; the anterior tibial artery continues as the dorsalis pedis - the name change occurs at the level of the ankle
external iliac	common iliac a.	inferior epigastric a., deep circumflex iliac a., femoral a.	lower limb	external iliac a. is continuous with the femoral a., the name change occurs at the inguinal ligament; the common iliac artery bifurcates

				anterior to the sacroiliac articulation
external pudendal, deep	femoral a.	unnamed muscular branches	origins of pectineus m., adductor longus m.; scrotum/labium majus	deep external pudendal a. may arise from the medial circumflex femoral a.
external pudendal, superficial	femoral a.	no named branches	skin and superficial fascia of the upper medial thigh, skin of the pubic region	superficial external pudendal a. is one of three superficial branches of the femoral a. near the inguinal ligament (see also: superficial circumflex iliac a., superficial epigastric a.)
femoral	external iliac a.	superficial epigastric a., superficial circumflex iliac a., superficial external pudendal a., deep external pudendal a., deep femoral a., descending genicular a., popliteal a.	thigh, leg and foot	femoral a. is continuous with the popliteal a., the name change occurs at the adductor hiatus
femoral, deep	femoral a.	medial circumflex femoral a., lateral circumflex femoral a., perforating aa. (3 or 4)	hip joint, proximal thigh, posterior thigh	deep femoral a. is the primary blood supply to muscles of the posterior compartment of the thigh
femoral, lateral circumflex	deep femoral a.	ascending br., transverse br., descending br.	lateral thigh and hip	lateral circumflex femoral a. arises from the femoral a. in ~14% of cases

femoral, medial circumflex	deep femoral a.	ascending br., descending br.	medial thigh and hip	medial circumflex femoral a. arises from the femoral a. in ~20% of cases
fibular	posterior tibial a.	nutrient br., lateral malleolar a., communicating br., perforating br.	muscles and fascia of the lateral leg ankle	fibular a. anastomoses at the ankle with the anterior and posterior tibial aa.; also known as: peroneal a.
genicular, descending	femoral a.	saphenous br., articular brs.	skin and superficial structures of the medial aspect of the knee and upper leg	descending genicular a. anastomoses with the genicular brs. of the popliteal a.
genicular, inferior lateral	popliteal a.	no named branches	lateral aspect of the knee	inferior lateral genicular a. anastomoses with the other genicular brs. of the popliteal a., circumflex fibular a. and anterior tibial recurrent a. to form the genicular anastomosis
genicular, inferior medial	popliteal a.	no named branches	medial aspect of the knee	inferior medial genicular a. anastomoses with the other genicular brs. of the popliteal a., circumflex fibular a. and anterior tibial recurrent a. to form the genicular anastomosis
genicular,	popliteal a.	no named branches	cruciate	middle genicular

middle			ligaments and deep structures of the knee	a. anastomoses with the other genicular brs. of the popliteal a., circumflex fibular a. and anterior tibial recurrent a. to form the genicular anastomosis
genicular, superior lateral	popliteal a.	no named branches	lateral aspect of knee	superior lateral genicular a. anastomoses with the other genicular brs. of the popliteal a., circumflex fibular a. and anterior tibial recurrent a. to form the genicular anastomosis
genicular, superior medial	popliteal a.	no named branches	medial aspect of knee	superior medial genicular a. anastomoses with the other genicular brs. of the popliteal a., circumflex fibular a. and anterior tibial recurrent a. to form the genicular anastomosis
gluteal, inferior	internal iliac a., anterior division	unnamed muscular branches	gluteus maximus m., hip joint	inferior gluteal a. participates in the formation of the cruciate anastomoses of the hip
gluteal, superior	internal iliac, posterior division	superficial br., deep br.	gluteus maximus m., gluteus medius m., gluteus minimus	superior gluteal a. participates in the formation of the cruciate

			m., hip joint	anastomoses of the hip
iliac, common	abdominal aorta	external iliac a., internal iliac a.	pelvis, lower limb	abdominal aorta bifurcates at the level of the L4 vertebral body to form the right and left common iliac aa.; the common iliac artery bifurcates anterior to the sacroiliac articulation into its terminal brs. (external iliac a. and internal iliac a.)
iliac, external	common iliac a.	inferior epigastric a., deep circumflex iliac a., femoral a.	lower limb	external iliac a. is continuous with the femoral a., the name change occurs at the inguinal ligament; the common iliac artery bifurcates anterior to the sacroiliac articulation
iliolumbar	internal iliac a., posterior division	iliac br., lumbar br.	iliacus m., psoas major m., quadratus lumborum m.	lumbar br. of the iliolumbar a. sends a small spinal br. into the vertebral canal
inferior epigastric	external iliac a.	cremasteric a.	lower rectus abdominis m., pyramidalis m., lower abdominal wall	inferior epigastric m. anastomoses with the superior epigastric m. within the rectus abdominis m.
inferior gluteal	internal iliac a., anterior division	unnamed muscular branches	gluteus maximus m., hip joint	inferior gluteal a. participates in the formation of the cruciate



				anastomoses of the hip
inferior lateral genicular	popliteal a.	no named branches	lateral aspect of the knee	inferior lateral genicular a. anastomoses with the other genicular brs. of the popliteal a., circumflex fibular a. and anterior tibial recurrent a. to form the genicular anastomosis
inferior medial genicular	popliteal a.	no named branches	medial aspect of the knee	inferior medial genicular a. anastomoses with the other genicular brs. of the popliteal a., circumflex fibular a. and anterior tibial recurrent a. to form the genicular anastomosis
lateral plantar	posterior tibial a.	proper plantar digital a. to lateral side of 5th digit	deep foot; the plantar arterial arch and its brs. supply the toes, including the distal phalangeal segment dorsally	lateral plantar a. becomes continuous with the plantar arterial arch
lateral tarsal	dorsalis pedis a.	no named branches	tarsal bones and joints of the lateral foot	lateral tarsal a. anastomoses with the arcuate a.
lumbar	abdominal aorta	anterior br., posterior br., spinal br.	psoas major m., psoas minor m., quadratus lumborum m., spinal cord and vertebral column, deep back muscles	the 4 lumbar arteries on each side arise from the posterior surface of the aorta at the level of vertebrae L1-L4; they course

				posterior to the psoas major m.
malleolar, anterior lateral	anterior tibial a.	no named branches	lateral side of the ankle	anterior lateral malleolar a. anastomoses with the posterior lateral malleolar a. and the perforating br. of the fibular a.
malleolar, anterior medial	anterior tibial a.	no named branches	medial side of the ankle	anterior medial malleolar a. anastomoses with the posterior medial malleolar a.
malleolar, posterior lateral	fibular a.	calcaneal brs.	lateral side of the ankle	posterior lateral malleolar a. anastomoses with the anterior lateral malleolar a.
malleolar, posterior medial	posterior tibial a.	no named branches	medial side of the ankle	posterior medial malleolar a. anastomoses with the anterior medial malleolar a.
medial plantar	posterior tibial a.	digital brs. (3)	medial side of the sole of the foot	medial plantar a. anastomoses with the plantar metatarsal aa., but does not usually participate in formation of the plantar arterial arch
medial tarsal	dorsalis pedis a.	no named branches	tarsal bones and joints of the medial side of the foot	medial tarsal aa. are 2-3 in number; they anastomose with the medial malleolar aa.
metatarsal,	dorsalis	dorsal digital aa.	dorsum of digits,	each dorsal

dorsal	pedis (1st), arcuate (2nd-4th)	(2)	excluding the distal phalangeal segment	metatarsal a. gives off a perforating br. that anastomoses with the plantar arterial arch
metatarsal, plantar	plantar arterial arch	perforating br., plantar digital aa. (2)	interosseous mm., deep portions of the foot; digits including the dorsum of the distal phalangeal segment	plantar metatarsal aa. anastomose with dorsal metatarsal aa.
middle genicular	popliteal a.	no named branches	cruciate ligaments and deep structures of the knee	middle genicular a. anastomoses with the other genicular brs. of the popliteal a., circumflex fibular a. and anterior tibial recurrent a. to form the genicular anastomosis
obturator	internal iliac a., anterior division	pubic br., acetabular br., anterior br., posterior br.	medial thigh and hip	anterior and posterior brs. pass on the anterior and posterior sides of the adductor brevis m.; aberrant obturator a. arises from the inferior epigastric a. in 30% of cases
plantar arterial arch	lateral plantar a.	plantar metatarsal aa. (4)	deep foot; its plantar metatarsal brs. and their brs. supply the toes, including the dorsum of the distal phalangeal	plantar arterial arch anastomoses with the deep plantar br. of the dorsalis pedis a.

			segment	
plantar metatarsal	plantar arterial arch	perforating br., plantar digital aa. (2)	interosseous mm., deep portions of the foot; digits including the dorsum of the distal phalangeal segment	plantar metatarsal aa. anastomose with dorsal metatarsal aa.
plantar, deep	dorsalis pedis	plantar metatarsal aa. (4)	deep foot; its plantar metatarsal brs. and their brs. supply the toes, including the dorsum of the distal phalangeal segment	anastomoses with lateral plantar a. to form the plantar arterial arch; the branches mentioned at left arise from the plantar arterial arch
plantar, lateral	posterior tibial a.	proper plantar digital a. to lateral side of 5th digit	deep foot; the plantar arterial arch and its brs. supply the toes, including the distal phalangeal segment dorsally	lateral plantar a. becomes continuous with the plantar arterial arch
plantar, medial	posterior tibial a.	digital brs. (3)	medial side of the sole of the foot	medial plantar a. anastomoses with the plantar metatarsal aa., but does not usually participate in formation of the plantar arterial arch
popliteal	femoral a.	anterior tibial a., posterior tibial a., 5 genicular brs.	knee, leg and foot	the popliteal a. is the continuation of the femoral a., the name change occurs at the adductor hiatus
posterior lateral malleolar	fibular a.	calcaneal brs.	lateral side of the ankle	posterior lateral malleolar a. anastomoses with

				the anterior lateral malleolar a.
posterior medial malleolar	posterior tibial a.	no named branches	medial side of the ankle	posterior medial malleolar a. anastomoses with the anterior medial malleolar a.
posterior tibial	popliteal a.	fibular a. (peroneal), circumflex fibular a., nutrient a. of the tibia, communicating br., posterior medial malleolar brs., medial calcaneal brs., lateral plantar a., medial plantar a.	posterior and lateral leg, plantar aspect of the foot	posterior tibial a. is the direct continuation of the popliteal a. the name change occurs at the inferior border of the popliteus m. where the popliteal a. bifurcates; the tibial a. bifurcates on the medial side of the foot to give rise to the medial plantar a. and lateral plantar a.
posterior tibial recurrent	anterior tibial a.	no named branches	posterior knee, popliteus m.	anastomoses with the other genicular aa. to participate in the formation of the genicular anastomosis
proper plantar digital	plantar metatarsal a., from the plantar arterial arch	no named branches	plantar aspect of each digit	proper plantar digital aa. supply the dorsum of the distal phalangeal segment and nail bed
pudendal, deep external	femoral a.	unnamed muscular branches	origins of pectineus m., adductor longus m.; scrotum/labium majus	deep external pudendal a. may arise from the medial circumflex femoral a.

<p>pudendal, superficial external</p>	<p>femoral a.</p>	<p>no named branches</p>	<p>skin and superficial fascia of the upper medial thigh, skin of the pubic region</p>	<p>superficial external pudendal a. is one of three superficial branches of the femoral a. near the inguinal ligament (see also: superficial circumflex iliac a., superficial epigastric a.)</p>
<p>recurrent, anterior tibial</p>	<p>anterior tibial a.</p>	<p>no named branches</p>	<p>anterior side of the knee and adjacent muscles</p>	<p>anterior tibial recurrent a. anastomoses with the genicular aa. to participate in the formation of the genicular anastomosis</p>
<p>recurrent, posterior tibial</p>	<p>anterior tibial a.</p>	<p>no named branches</p>	<p>posterior knee, popliteus m.</p>	<p>anastomoses with the other genicular aa. to participate in the formation of the genicular anastomosis</p>
<p>superficial epigastric</p>	<p>femoral a.</p>	<p>cutaneous brs.</p>	<p>superficial fascia and skin of the lower abdominal wall</p>	<p>superficial epigastric a. is one of three superficial arteries that arise from the femoral a. (see also: superficial circumflex iliac a. and superficial external pudendal a.)</p>
<p>superficial external pudendal</p>	<p>femoral a.</p>	<p>no named branches</p>	<p>skin and superficial fascia of the upper medial thigh, skin of the pubic region</p>	<p>superficial external pudendal a. is one of three superficial branches of the femoral a. near</p>

				the inguinal ligament (see also: superficial circumflex iliac a., superficial epigastric a.)
superior lateral genicular	popliteal a.	no named branches	lateral aspect of knee	superior lateral genicular a. anastomoses with the other genicular brs. of the popliteal a., circumflex fibular a. and anterior tibial recurrent a. to form the genicular anastomosis
superior medial genicular	popliteal a.	no named branches	medial aspect of knee	superior medial genicular a. anastomoses with the other genicular brs. of the popliteal a., circumflex fibular a. and anterior tibial recurrent a. to form the genicular anastomosis
sural	popliteal a.	unnamed muscular aa.	gastrocnemius m., soleus m., plantaris m.	sural aa. are often confused with the inferior genicular aa. during dissection
tarsal, lateral	dorsalis pedis a.	no named branches	tarsal bones and joints of the lateral foot	lateral tarsal a. anastomoses with the arcuate a.
tarsal, medial	dorsalis pedis a.	no named branches	tarsal bones and joints of the medial side of the foot	medial tarsal aa. are 2-3 in number; they anastomose with the medial malleolar aa.



tibial recurrent, anterior	anterior tibial a.	no named branches	anterior side of the knee and adjacent muscles	anterior tibial recurrent a. anastomoses with the genicular aa. to participate in the formation of the genicular anastomosis
tibial recurrent, posterior	anterior tibial a.	no named branches	posterior knee, popliteus m.	anastomoses with the other genicular aa. to participate in the formation of the genicular anastomosis
tibial, anterior	popliteal a.	anterior tibial recurrent a., posterior tibial recurrent a., anterior malleolar a., medial malleolar a., lateral malleolar a., dorsalis pedis a.	anterior leg; dorsum of foot and deep foot	anterior tibial a. becomes continuous with the dorsalis pedis a.; the name change occurs at the level of the ankle joint
tibial, posterior	popliteal a.	fibular a. (peroneal), circumflex fibular a., nutrient a. of the tibia, communicating br., posterior medial malleolar brs., medial calcaneal brs., lateral plantar a., medial plantar a.	posterior and lateral leg, plantar aspect of the foot	posterior tibial a. is the direct continuation of the popliteal a. the name change occurs at the inferior border of the popliteus m. where the popliteal a. bifurcates; the tibial a. bifurcates on the medial side of the foot to give rise to the medial plantar a. and lateral plantar a.

**NOTE: Many veins follow the branching and distribution pattern of the artery of the same name. This table contains veins that do not travel with an artery of the same name, or that run an independent course from the artery of the same name. See also: Arteries Tables.**

<b>Selected Veins of the Lower Limb - Listed Alphabetically</b>				
<b>Vein</b>	<b>Tributaries</b>	<b>Drains Into</b>	<b>Regions Drained</b>	<b>Notes</b>
dorsal metatarsal v. of the foot	dorsal digital vv.	dorsal venous arch of the foot	dorsal aspects of the digits of the foot	dorsal metatarsal v. drains the adjacent sides of two digits
dorsal venous arch of the foot	dorsal digital vv. and dorsal metatarsal vv.	great saphenous v. medially, small saphenous v. laterally	dorsum of the digits and the superficial structures of the dorsum of the foot	dorsal venous arch is visible through the thin skin on the dorsum of the foot
greater saphenous v.	medial end of dorsal venous arch of foot, perforating communications with deep veins, superficial epigastric v., superficial circumflex iliac v., superficial external pudendal v.	femoral v.	skin and superficial fascia of the medial side of the foot and leg; skin and superficial fascia of most of the thigh; lower abdominal wall; perineal region	greater saphenous v. is frequently used as graft material in coronary bypass surgery
lesser saphenous v.	lateral end of the dorsal venous arch of foot	popliteal v.	skin and superficial fascia of the lateral side of the foot and leg	passes deeply into the popliteal fossa
metatarsal, dorsal of the foot	dorsal digital vv.	dorsal venous arch of the foot	dorsal aspects of the digits of the foot	dorsal metatarsal v. drains the adjacent sides of two digits

**Note: Although the extremities contain numerous lymphatic capillaries, within these regions there are very few lymph nodes that are large enough to be named.**

<b>Lymphatics of the Lower Limb - Listed Alphabetically</b>					
<b>Structure</b>	<b>Location</b>	<b>Afferents from</b>	<b>Efferents to</b>	<b>Regions drained</b>	<b>Notes</b>
deep inguinal nodes	along the medial side of the femoral v. deep to the fascia lata and inguinal ligament	superficial inguinal nodes, popliteal nodes	external iliac nodes	lower limb, external genitalia, lower part of the anterior abdominal wall	the deep inguinal node in the femoral canal is called the node (or gland) of Cloquet
external iliac nodes	along the external iliac vessels	superficial inguinal nodes; deep inguinal nodes; inferior epigastric nodes	common iliac nodes	lower limb; external genitalia; lower part of the anterior abdominal wall	external iliac nodes are 8 to 10 in number
iliac nodes, common	along the common iliac vessels; over the sacral promontory	external iliac nodes, internal iliac nodes	lumbar (lateral aortic) chain of nodes	lower limb; pelvic organs, perineum, lower part of the anterior abdominal wall	common iliac nodes are approximately 6 in number
iliac nodes, external	along the external iliac vessels	superficial inguinal nodes; deep inguinal nodes; inferior epigastric nodes	common iliac nodes	lower limb; external genitalia; lower part of the anterior abdominal wall	external iliac nodes are 8 to 10 in number

iliac nodes, internal	along the internal iliac vessels	lymphatic vessels from the pelvic viscera	common iliac nodes, external iliac nodes	pelvis, perineum and gluteal region	internal iliac nodes are 4 to 8 in number
inguinal nodes, deep	along the medial side of the femoral v. deep to the fascia lata and inguinal ligament	superficial inguinal nodes, popliteal nodes	external iliac nodes	lower limb, external genitalia, lower part of the anterior abdominal wall	the deep inguinal node in the femoral canal is called the node (or gland) of Cloquet
inguinal nodes, superficial	in the superficial fascia parallel to the inguinal ligament and along the terminal part of the greater saphenous v.	lymphatic vessels from the superficial lower limb, superficial abdominal wall, perineum	external iliac nodes; deep inguinal nodes	lower abdominal wall; external genitalia; superficial parts of the lower limb	superficial inguinal nodes are 12-20 in number; they become inflamed during infections of the lower limb; they may become inflamed during infections of the external genitalia
lateral aortic nodes	along the inferior vena cava and abdominal aorta from the aortic bifurcation to the aortic hiatus of the diaphragm	common iliac nodes; lymphatic vessels from the posterior abdominal wall and viscera	efferents form one lumbar trunk on each side	lower limb; pelvic organs; perineum; anterior and posterior abdominal wall; kidney; suprarenal gland; respiratory diaphragm	also known as: lumbar nodes; the intestinal trunk drains into to the left lumbar trunk; the lumbar trunks unite to form the thoracic duct/cisterna chyli
lumbar nodes	along the inferior vena cava and abdominal aorta from the aortic bifurcation to the aortic	common iliac nodes; lymphatic vessels from the posterior abdominal wall and	efferents form one lumbar trunk on each side	lower limb; pelvic organs; perineum; anterior and posterior abdominal wall;	also known as: lateral aortic nodes; the intestinal trunk drains into to the left lumbar trunk; the lumbar trunks

	hiatus of the diaphragm	viscera		kidney; suprarenal gland; respiratory diaphragm	unite to form the thoracic duct/cisterna chyli
popliteal nodes	in the popliteal fossa along the popliteal vessels	lymphatic vessels that accompany the anterior tibial , posterior tibial and fibular vessels	deep and superficial inguinal nodes	leg and foot	5 or 6 nodes located in the fat of the popliteal fossa
superficial inguinal nodes	in the superficial fascia parallel to the inguinal ligament and along the terminal part of the greater saphenous v.	lymphatic vessels from the superficial lower limb, superficial abdominal wall, perineum	external iliac nodes; deep inguinal nodes	lower abdominal wall; external genitalia; superficial parts of the lower limb	superficial inguinal nodes are 12-20 in number; they become inflamed during infections of the lower limb; they may become inflamed during infections of the external genitalia

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